Allotment Evaluation (AE) For San Pedro Mt. (#847)

Livestock Use	Permittee		Authorization Number 3001523
San Pedro Mt. 11 Cattle 03/01 - 02/28	Livestock Use		
Livestock Percent Public Land Allotment Profile Physical Description Physical Description Allotment 847 is located approximately 3 miles southeast of Golden, in Santa Fe County, New Mexico. Elevation on this allotment is roughly between 7,000 and 8,200 feet. Landforms on the allotment include; rolling hills. This allotment contains 4 parcels. Three soil types are identified within the federal lands in this allotment. They include: Cochiti extremely cobbly loam, 15 to 35 percent slopes. This soil consists of cobbly loams with a rooting depth over 60 inches. Parent materials include: Colluvium and slope alluvium derived from monzonite. Average annual precipitation in that area ranges from 13 to 15 inches. Vegetation is characterized by twoneedle pinyon, mountain mahogany, Gambel's oak, blue grama, oneseed juniper and sideoats grama. Pedregal very cobbly loams with a rooting depth between 20 to 36 inches. Parent materials include: Alluvium derived from monzonite. Average annual precipitation in that area ranges from 13 to 15 inches. Vegetation is characterized by oneseed juniper, true mountain mahogany, pinyon pine, pricklypear and skunkbush sumac. Wandurn-Alchonzo-Rubble land complex, 35 to 90 percent slopes. This soil consists of cobbly and gravelly sandy loams with a rooting depth between 20 to 59 inches. Parent materials include: Loamy colluvium and slope alluvium derived from tertiary age igneous intrusive monzonite. Average annual precipitation in that area ranges from 14 to 18 inches. Vegetation is characterized by pinyon pine, banana yucca, muttongrass, sideoats grama and wolftail. Land Status BLM State Private		Period of Use	<u> </u>
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	Management Objectives	The allotment is under a 'Custodial' ('C') management category. 'C' category allotments have evidence of a "not apparent" to "upward" long term trend, have no significant resource conflicts and have a low potential for improvement in vegetative production.
	Key Forage Species	blue grama, sideoats grama, and muttongrass
	Grazing System	Season long grazing
Management Evaluation	Actual Use	Actual use has not been reported and figures below were determined from paid bill reports. AUMs Year
		132 2002 132 2001 132 2000 132 1999 132 1998
	Utilization	Due to the lack of staff utilization studies have not been conducted. During the assessment visit it was determined that the allotment receives very light grazing.
	Climate	The past water year (Oct. 1, 2007 – Sept. 30, 2008) the average temperature has been nearly average (-1 to 0 degrees Fahrenheit below average) and precipitation has been below average (-2 to -1 inches below average). This should provide below average plant growth on warm season plants and cool season plants. During the past 10 years (1998-2007) the temperature has been at or above average and precipitation has been fluctuating annually, but it is important to note that between 2000 and 2004 the 12 month running average was below the annual average. (Based on the Northern Mountains Climate Division, New Mexico from the Western Regional Climate Center.) Climate change is a concern not only in New Mexico but globally. "Effects of increasing atmospheric CO ₂ levels on plants are predicted to cause dramatic changes in native vegetation. Global climate change may accelerate rates of plant extinction, while ecosystem structure and function may shift. Ecological response to global changes in climate could shift ecosystems (i.e., shrublands replacing grasslands) and have effects, not only to an individual species, but to the ecosystem itself by additions and deletions of vegetation species" (Johnson, H.B., and H.S. Mayeux. 1992. Viewpoint: A view on species additions and deletions and the balance of nature. Journal of Wildlife Management 45:322-333.)

		We anticipate that our monitoring efforts will help indicate
		vegetation shifts, allowing for management modifications to
	T 1	address global climate change.
	Trend	No long term trend plots have been established on this allotment. A Rangeland Health Matrix was completed on July 1, 2008. The actual survey forms are available within the allotment file. Below is a summation of the information gathered by the survey. Within the Rangeland Health Attributes are three different categories of indicators. The categories include; Soil and Site Stability, Hydrologic Function and Biotic Integrity. The percent of indicator score was created by multiplying an assigned value for departure from site descriptions/reference areas by the number of indicators at the level. Departure scores are categorized as: none to slight = 5, slight to moderate = 4, moderate = 3, moderate to extreme = 2 and extreme = 1. For example, if all indicators under Soil/Site Stability were rated none to slight (best condition), the equation would be 5(score)*10indicators=50/50*100 = 100% similarity, or what is expected based on an Ecological Site Description. Standards for each individual category are met when they are rated Proper Functioning Condition or Functioning at Risk-Upward Trend. Not meeting standards are ratings of; Functioning at Risk-Static, Functioning at Risk-Downward Trend and Non Functional.
		Soil and Site Stability Six indicators were deemed None to Slight while four were deemed Slight to Moderate. Rating: 92%
		Hydrologic Function Five indicators were deemed None to Slight while five were deemed Slight to Moderate. Rating: 90%
		Biotic Integrity Eight indicators were deemed None to Slight while one was deemed Slight to Moderate. Rating: 98%
		Overall Rating: 93%
		Soils were rated at Proper Functioning Condition, Biotic Flora was rated at Proper Functioning Condition and Biotic Fauna was rated at Proper Functioning Condition.
		Current livestock does not appear to be adversely affecting this allotment - all standards are being met.
F	Riparian	There are no riparian areas within this allotment.
	Wildlife	Seasonal home ranges in the allotment include those for elk, deer,

		mountain lion, black bear, bobcat, fox, coyote, small mammals, bats, raptors, turkey vulture, songbirds, and a variety of insects.
		Elk and deer are grazers/browsers; however there is little dietary overlap between deer and cattle. Best management practices i.e. rotational grazing would ensure that forage production within this area can support both wildlife and livestock on a sustained basis.
	Threatened and	It is determined that there are no federally listed threatened or
	Endangered	endangered species likely to be found in the subject allotment.
	Species	There is no designated critical habitat for any species listed by the
	_	USFWS within the allotment.
Conclusions and		The vegetation is in good condition with good diversity. It is
Recommendations		recommended that at least minimal monitoring be established on
		the allotment to determine trend. It is recommended that the lease
		be renewed for the next ten years without any changes.

